

• TECHNICAL DATA SHEET •

30" FREESTANDING SELF-CLEAN COIL TOP RANGE WITH ELECTRONIC OVEN CONTROL



IMPORTANT SAFETY NOTICE:

This information is intended for use by individuals possessing adequate electrical, electronic and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller can not be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

DISCONNECT POWER BEFORE SERVICING

IMPORTANT- RECONNECT ALL GROUNDING DEVICES.

All parts of this appliance capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

GROUNDING SPECIFICATIONS

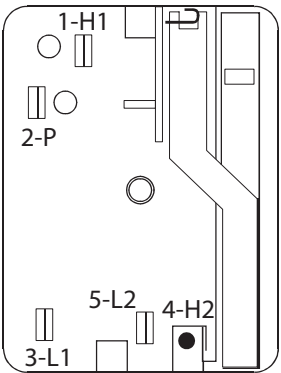
Ground Path Resistance 0.10 Ω Max.
Insulation Resistance 250K Ω Min.

INSTALLATION REQUIREMENTS

1. Power Supply

This range must be connected to a supply circuit with the proper voltage and frequency as specified on the data plate. Wire size must conform to the National Electric Code or the prevailing local code. The rating plate is located on the front left support leg (open oven drawer for access).

CURRENT SENSITIVE



ND336-16

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3. This terminal is rated for use of copper or aluminum conductors.
See Installation instructions for further details.

4. Leveling Range

Level Range by adjusting two front and two rear leveling screws. (Remove drawer for access).

SURFACE UNITS

Plug in terminals should be straight and parallel for ease of insertion and removal. If terminals require straightening, be careful not to damage the plastic bushings.

SURFACE UNIT CONTROLS

Replacement switches are current sensitive. Proper connection of all leads must be observed (L1 lead connected to L1 terminal etc.). Reverse wiring of one switch may blow when a correctly wired switch and a reversed switch are turned on simultaneously.

Replacement

The infinite switches can be replaced by removing the back cover or by removing the control panel. The infinite switch should only be replaced with a current sensitive switch with the same wattage rating. See table below.

Surface Unit description	Surface Unit wattage	Infinite Switch wattage
3 turn 6"	1,250	1,250
4 turn 6"	1,500	1,560
4 turn 8"	2,100	2,040
5 turn 8"	2,600	2,600

Surface Unit Receptacle

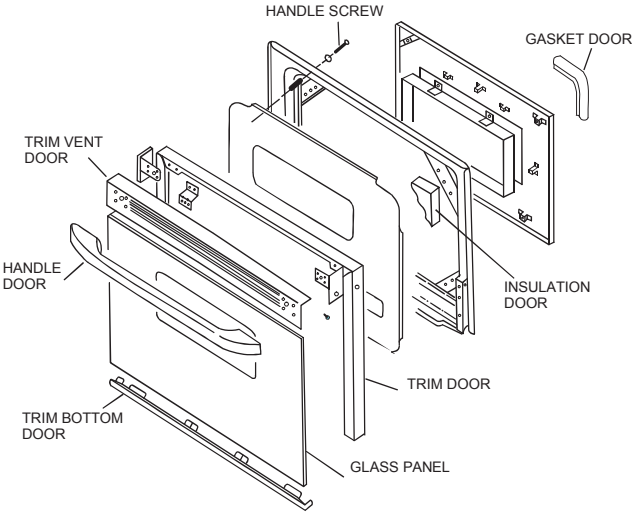
The receptacle is mounted to the cooktop by a single screw. The receptacle is replaced as a complete assembly (WB17X5113) and consists of the receptacle and bracket, two short leads with preattached terminals, two ceramic wire nuts, and heat shrink tubing.

Possible Causes for Wobbly, Uneven or Rattling Surface Units

- Burner Bowls not flat
- Cooktop not flat
- Surface Units Support (spider) not flat
- Receptacle Block / Clip mounted crooked
- Loose or Stripped mounting screw
- Bent surface unit terminals

OVEN DOOR

The oven door consists of two major sub assemblies: Outer Panel Assembly and Inner Panel Assembly. The two assemblies are held together by four 1/4" hex screws at the bottom of the door and two cross head screws on the inside panel, behind the handle.



Glass replacement

Remove eight screws from bottom trim and slide glass out.

Handle replacement

Separate the outer and inner panel assemblies. Remove the two screws holding the handle to the outer panel assembly

End cap replacement

Remove the two screws holding the end caps to the side trim.

Vent trim replacement

Separate the outer and inner panel assemblies. Remove the handle and end caps. Remove the two screws holding the vent trim to the side trims.

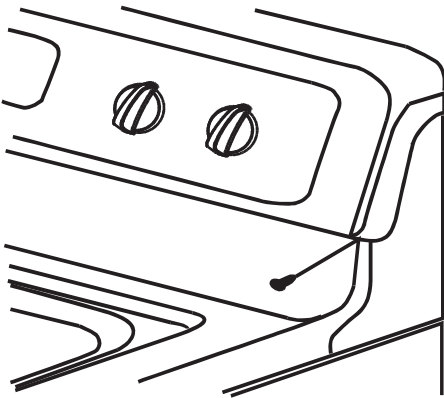
Window replacement

Separate the outer and inner panel assemblies. Remove the four screws holding the window retainer to the inner panel.

Front access

The control panel is front serviceable as follows:

- Remove the (1) T-15 torx mounting screw from each end front.
- Loosen the (2) 1/4" hex head screws one in each upper corner back side.
- Gently pull the backguard panel out at the bottom and lift the panel upward.
- Panel can now be laid on the cooktop for access to components.

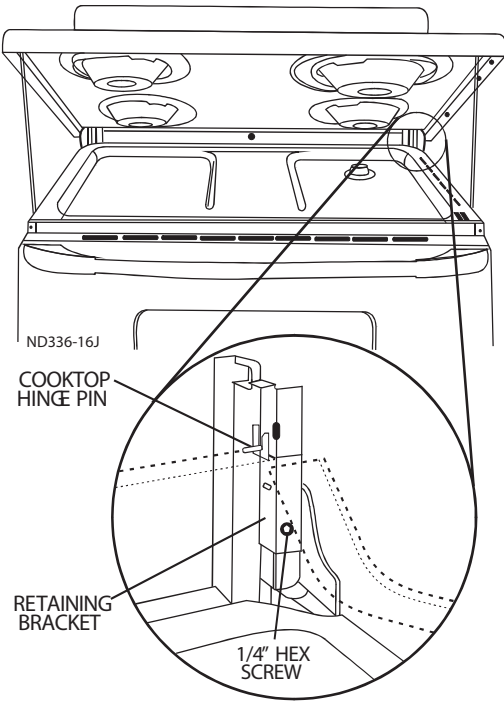


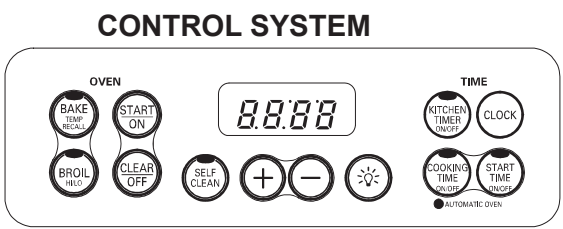
COOKTOP REMOVAL

The cooktop is also front serviceable.

- DISCONNECT POWER TO RANGE
- Remove two screws.
- Lift cooktop upward and support.
- This position will allow access to the retaining brackets that are holding the cooktop hinge pins. They are located on the control panel supports and are secured with 1/4" hex screws.
- Remove the two hex screws and lift the brackets to remove them.
- Remove the ground screw and wire located in the rear of the cooktop.

Reverse these instructions to replace cooktop.





Oven control with time of day clock, timer and automatic oven control functions. Variable clean time from three hours to five hours.
(Not all features on all models).

TO ADJUST BAKE TEMPERATURES

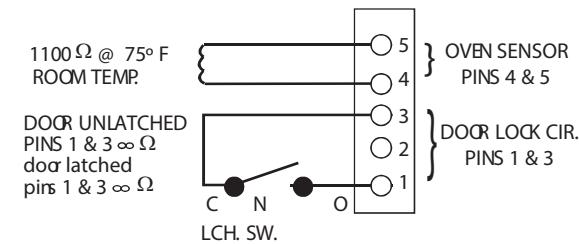
- The bake temperature can be adjusted by $\pm 35^{\circ}\text{F}$ in 1°F increments.
- Press and hold both the *BAKE* and *BROIL* pads for about 2 seconds until the display shows *SF*.
 - Press the *BAKE* pad. A two digit number shows in the display.
 - Press the $+$ pad to increase the temperature in 1 degree increments or press the $-$ pad to decrease the temperature in 1 degree increments.
 - Approximately five seconds after the last change is made, the display will return to time of day and the oven is ready for use.
 - Press *STAR T* key. The control will return to Time of Day.

The following voltages must be present on the control board.

TERMINALS	VOLTAGE
L1 to N	120 volts (at all times) Control Transformer .
L1, L2 to Bake	240 volts
L1, L2 to Broil	240 volts

SENSOR & LOCK CIRCUITS OHMMETER TEST

Disconnect power and make measurements from side of connector that has terminals exposed.



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FAULT CODES

FAILURE CODE	MEANING	CORRECTION
F0	SHORTED CANCEL / OFF KEY	Power down then power up the range. If the fault condition reappears within 15 minutes - REPLACE CONTROL.
F2	OVEN OVERTEMPERATURE CONDITION 1) Door unlocked — oven exceeded 620° F 2) Door locked — oven exceeded 930° F 3) Door Latch unlocked while oven in excess of 620° F.	1) If no overtemperature condition occurred: Check all contacts and connections in sensor circuit. Eliminate excessive resistance in sensor circuit due to increased contact / connector resistance. 2) If overtemperature condition occurred: look for welded relay contacts on bake, broil, or double-line-break relays. If relay contact welding is confirmed REPLACE CONTROL. 3) Ensure Door Latch stays locked for duration of Clean cycle.
F3	OPEN OVEN SENSOR Sensor resistance > 2900 ohms.	Measure sensor circuit resistance at sensor / lock switch connector (should be 1100 ohms at room temperature). Ensure each sensor lead to chassis ground resistance is infinitely high.
F4	SHORTED OVEN SENSOR Sensor resistance < 950 ohms.	If open or short circuit is detected: 1) Look for cut or pinched sensor harness wire. 2) Look for sensor leads shorted to chassis ground. 3) Look for loss of terminal contact in the harness and at the control. 4) Check sensor resistance directly at sensor harness connector (away from the control). If reading is abnormal - REPLACE OVEN SENSOR. If sensor circuit appears to be normal: 1) Reinstall sensor / lock switch connector on the control and measure sensor resistance at solder joints on the back of the control circuit board. If abnormal resistance reading is observed - RESTORE CONTACT PRESSURE ON SENSOR / LOCK SWITCH CONNECTOR . If corrective actions above do not eliminate the problem: REPLACE CONTROL
F5	CONTROL SUPERVISORY CIRCUIT FAILURE	REPLACE CONTROL
F7	SHORTED MATRIX KEY	Power down then power up the range. If the fault condition reappears within 15 minutes - REPLACE CONTROL.
F8	EEPROM ERROR	Power down then power up the range. If the fault condition reappears within 5 minutes - REPLACE CONTROL.

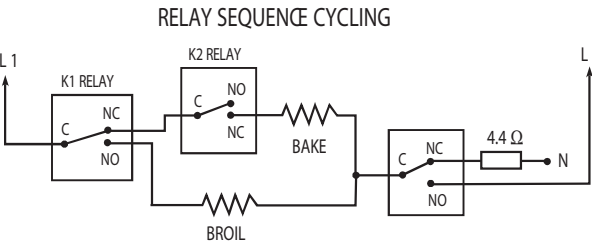
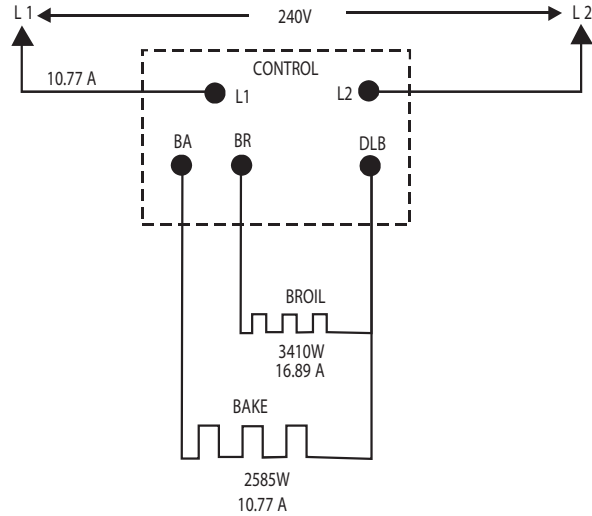
The relays are in series so that only one heating element can be on at a time. Therefore, the control cycles between the bake and broil elements for all heating operations except broil (when only the broil is on).

Note: When making heat element voltage checks, make measurement for at least 1 minute during an “ON” cycle for the heated element. The delay cycle when switching from one element to another will vary with the particular operation being performed.



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CIRCUITS FOR BAKE AND BROIL OPERATION



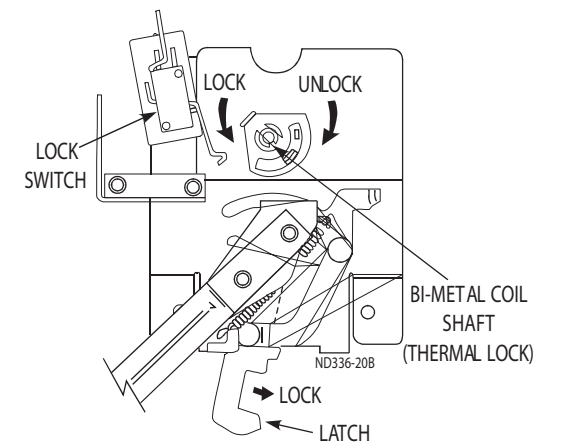
DOOR LATCH MECHANISM

The Latch Mechanism is thermally operated. When the latch handle is moved to the clean position the latch hook engages a slot in the oven door .

As the clean cycle progresses the increase in oven temperature causes a bi-metal coil on the latch mechanism to expand. This expansion causes a cam to rotate into the path of the latch mechanism locking it into position.

This cam will keep the door from being unlatched. This interlock will usually engage at an oven temperature between 450 and 550 degrees F. It will remain locked until the oven temperature has dropped below these temperatures (usually within 30 minutes after the clean cycle has stopped).

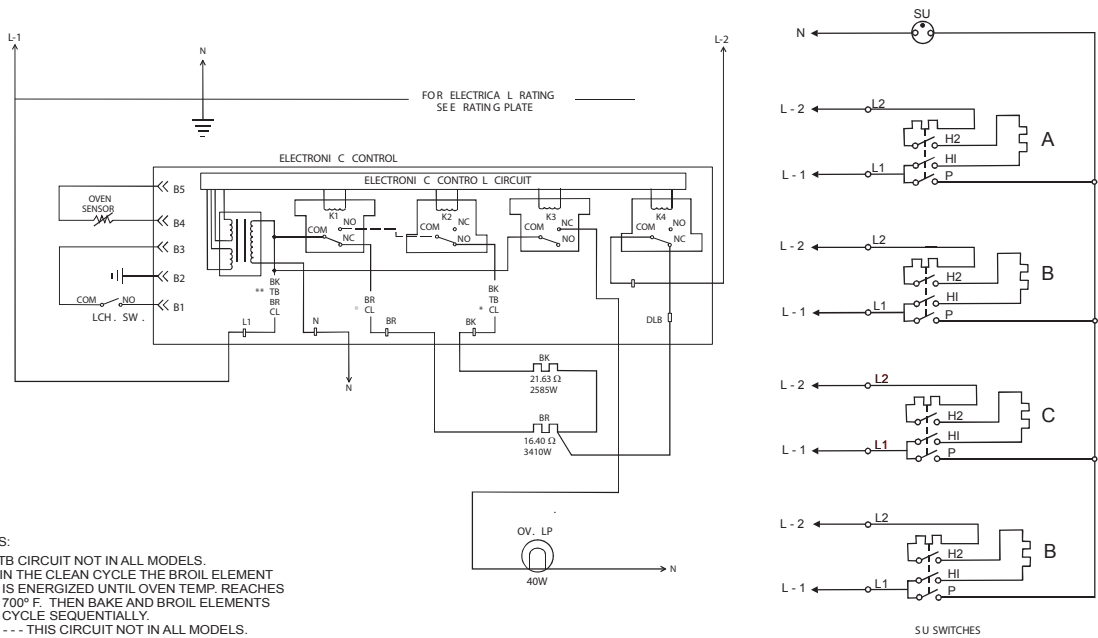
Note: When installing a new latch make sure that the latch arm stop is rotated fully to the unlock position (clockwise).



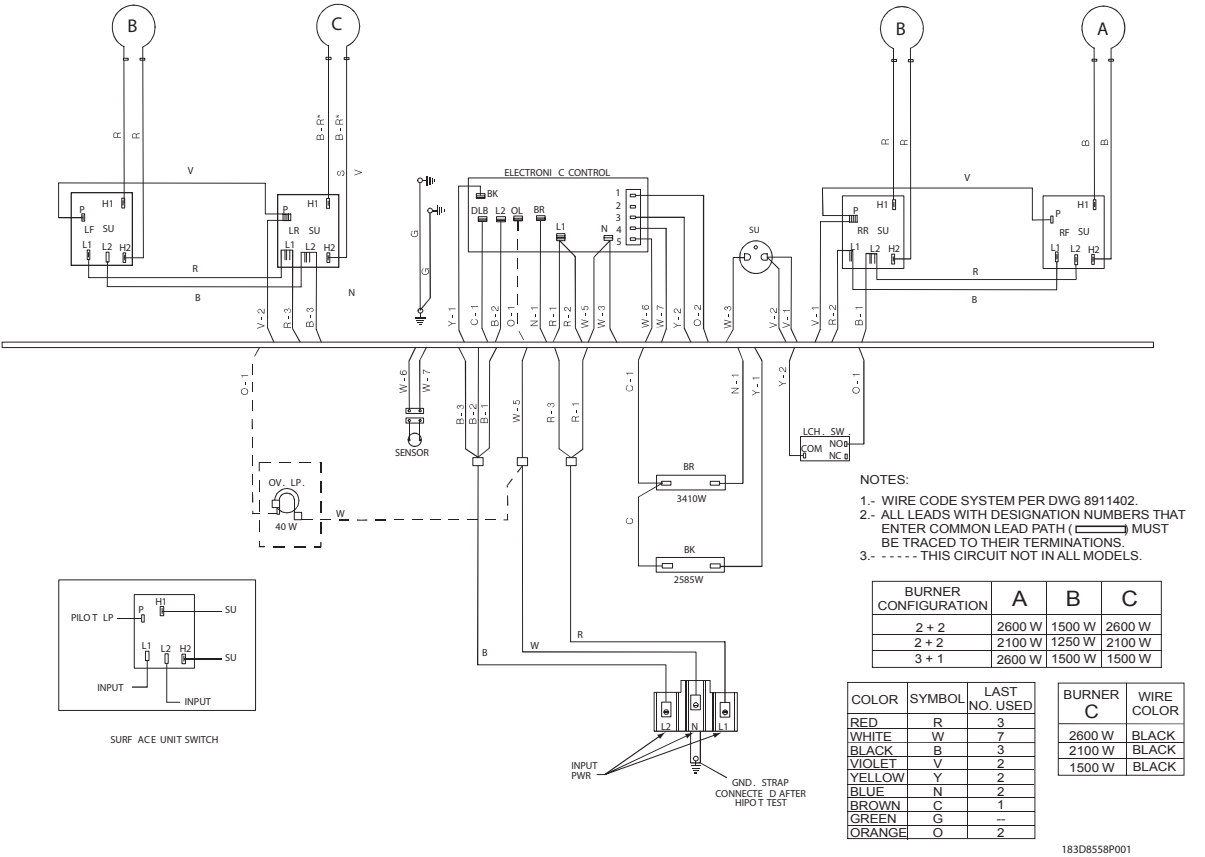
SCHEMATIC DIAGRAM

WARNING

POWER MUST BE DISCONNECTED BEFORE SERVICING THIS APPLIANCE



WIRING DIAGRAM



NOTE: FOR SERVICE REPLACEMENT USE 16GA 150° C WIRE EXCEPT AS INDIVIDUALLY NOTED ON LEADS. ALL 150° C WIRE COLOR DESIGNATED BY HASH MARK